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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/377,642	08/19/1999	MARC LESLIE COHEN	AT9-99-287	8153

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DUKE W YEE
CARSTENS YEE & CAHOO LLP
P O BOX 802334
DALLAS, TX 75380

EXAMINER

TUNG, KEE M

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/377,642

Applicant(s)

COHEN ET AL

Examiner

Kee M Tung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. In view of the Appeal Brief filed on 11/4/02, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7-11, 25-29 and 31-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to describe the claimed features of "collecting a **set of input operations** into a **batch of input operations** substantially equal to a number of rasters in a video display" (claims 7, 25 and 31); "collecting a **set of output operations**

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into a **batch of output operations** substantially equal to a number of rasters in a video display" (claims 8 and 26); and "collecting a **set of output operations** into a **batch of input operations** substantially equal to a number of rasters in a video display" (claims 11, 29 and 32). Page 17, lines 2-8 of the specification merely discussed that "video accesses being grouped into batches of entirely input or entirely output operations. As a result, the number of delays encountered by waiting for the bus to change directions is minimized. By batching the input and output on each line, video performance may be doubled." However, the specification fails to discuss "collecting a set of input/output operations into a batch of input/output operations substantially equal to a number of rasters in a video display" nor illustrated in the drawings. Therefore, the claims are rejected as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noorbakhsh (5,699,498).

Noorbakhsh teaches a method in a data processing system (computer system, col. 1, lines 13-14) for performing a raster operation (col. 1, line 30) of graphics data,

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wherein the data processing system includes a system memory (col. 1, line 31-32) and a video memory (36-37), wherein the system memory and the video memory are connected by a bus (system bus, col. 1, line 34, it is noted that the video memory is not directly connected to the system bus) and wherein the graphics data is organized into picture elements (array of pixels, col. 1, line 41), comprising selecting a first plurality of picture elements from the system memory and selecting a second plurality of picture elements from the video memory (it is noted that Noorbakhsh fails to explicitly suggest or teach "selecting a first and second plurality of pixels from the system and video memories". Noorbakhsh suggests or teaches "reading data from source (system memory) and destination (video) memory areas" (col. 1, lines 25-27). In order to read data from the memory areas, Noorbakhsh must first selected the data and then read the selected data.), wherein "the first and second plurality of picture elements are selected such that changes in a direction of data on the bus are minimized when performing raster operations on the first and second plurality of picture elements." (It is noted that in accordance with the present specification, page 12, lines 20-30, this is done by transferring a block of pixels (such as, a scan line) instead of one pixel at time. Noorbakhsh clearly suggests or teaches "bit boundary block transfer (BitBLT) engines are useful in VGA controller (graphics engine) for accelerating BitBLT operations. A BitBLT operation involves a block data transfer such as, moving a **rectangle of data** (such as, a scan line) from one area to another" (col. 1, lines 19-24)); reading the first and second plurality of picture elements from the system and video memories (col. 1, lines 25-27); performing a raster operation on the first and second plurality of picture

elements to form a plurality of processed picture elements (col. 1, lines 27-30); and writing the plurality of processed picture elements to the video memory (col. 1, lines 30-31). Therefore, at least claims 1-6, 12-24 and 30 would have been obvious by Noorbakhsh.

Noorbakhsh further teaches a method for performing raster operations in a graphics system (col. 1, lines 24-31), comprising collecting a set of input/output (or output (claim 11)) operations (such as, data from source and destination memory areas) into a batch (block) of input/output (or input (claim 11)) operations (such as, block data in BitBLT) substantially equal to a number of rasters in a video display (such as, would have been obvious if not inherent to the teachings of one of the logical operations, col. 1, lines 28-30); and ~~send~~ sending the set of input operations on a video bus (private bus by VGA controller, col. 1, lines 34-36) in a single operation (such as, block data transfer, transfer a block of data in a single operation, col. 1, lines 21-22). Therefore, at least claims ~~7~~ 8-11, 25-29 and 31-32 would have been obvious.

Response to Arguments

6. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

The rejections have been modified in order to fully considered applicant's arguments.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M Tung whose telephone number is 703-305-9660. The examiner can normally be reached on Tuesday - Friday from 6:00 am - 4:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

kmt
December 6, 2002



Kee M Tung
Primary Examiner
Art Unit 2676



Matthew C. Bella
Primary Examiner